

# Certificate of Analysis

Analysed essential oil : Orange (sweet)

Analysis date : January, 30<sup>th</sup> 2017

Batch : 027QB701

Shelf life : July 2018

## ❖ General description

Essential oil	Orange (sweet)	Origin	Brésil
Latin name	Citrus sinensis L.		

## ❖ Organoleptic characteristics

Appearance	Clear and mobile liquid
Colour	Yellow Orange
Odour	Characteristic

## ❖ Physico-chemical characteristics

	Results (at 20°C)	Technical specifications				
Specific gravity	0.850	0.842	<	d	<	0.850
Refractive index	1.4731	1.4700	<	IR	<	1.4760
Optical rotation	+96,50°	+94°	<	$[\alpha]^{20}_d$	<	+99°
Peroxyde index	5,2 mmol/L	0 mmol/L	<	IP	<	20 mmol/L

## ❖ Volatile elucidation

GC : Perkin Elmer – Clarus 500

Column : Elite – WAX m, Ø 0.25 mm, 0.25 µm df

Injection : split

Detector : FID

Carrier gas : H<sub>2</sub>

⇒ See Chromatogram : polar column

Date : 2017-01-30

Software Version : 6.3.2.0646  
Sample Name : Orange douce 027QB701  
Instrument Name : CLARUS 500  
Rack/Vial : 0/6  
Sample Amount : 1.000000  
Cycle : 6

Date : 1/31/2017 10:57:20 AM  
Data Acquisition Time : 1/27/2017 8:50:22 PM  
Channel : B  
Operator : Charlene  
Dilution Factor : 1.000000

Result File :  
Sequence File : C:\Sequences\CPG\2017\170127.seq

## Rapport d'analyse

colonne polaire Elite WAX

pic #	Nom composant	TR [min]	Aire [%]
1	pinene <alpha>	3.10	0.54
2		3.18	0.02
3	pinene <beta>	4.49	0.29
4	sabinene	4.79	0.30
5	carene <delta-3>	5.41	0.17
6	phellandrene<alpha>	5.80	0.04
7	myrcene	5.89	1.79
8	limonene	6.84	94.07
9	phellandrene <beta>	6.94	0.25
10	terpinene <gamma>	8.06	0.38
11		8.37	0.02
12	cymene <p>	8.78	0.06
13	terpinolene	9.21	0.06
14	octanal <n>	9.45	0.22
15		13.10	0.04
16		14.68	0.03
17		15.12	0.03
18		16.19	0.05
19	copaene <alpha>	16.50	0.03
20	decanal <n>	16.96	0.22
21	linalool	19.02	0.50
22		19.33	0.07
23		19.97	0.04
24	caryophyllene <E>	20.12	0.10
25		20.51	0.04
26		21.55	0.02
27		23.06	0.03
28	neral	23.18	0.06
29	terpineol<alpha>	23.96	0.11
30	valencene	24.45	0.08
31		24.61	0.04
32		24.70	0.04
33	geranial	25.00	0.10
34		25.15	0.05
35		25.27	0.03
36	cadinene <delta>	25.98	0.03
37		28.70	0.03
38		29.39	0.02
39		34.45	0.02
			100.00

# Chromatogram

Sample Name : Orange douce 027QB701      Sample #: 027QB701      Page 1 of 1  
FileName : C:\Data\Colonne Polaire\Huiles Essentielles\Orange\Orange Douce\2017\orange douce 170127.raw  
Date : 1/31/2017 10:57:21 AM  
Method : orange douce.mth      Time of Injection: 1/27/2017 8:50:22 PM  
Start Time : 0.00 min      End Time : 82.00 min      Low Point : -47.13 mV      High Point : 993.88 mV  
Plot Offset: -47.13 mV      Plot Scale: 1041.0 mV

